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### Acrylamide and Consumers

Thank you very much for the opportunity to participate in this meeting. I applaud the FDA for holding this meeting to apprise the public about its activities related to acrylamide.

The attention that the FDA is paying to acrylamide is well-merited. Acrylamide is widely recognized to be a carcinogen in rats and mice and, based on those studies, is considered a probable human carcinogen. Epidemiological data is very limited, though the major study linked acrylamide exposure to pancreatic cancer in workers.<sup>1</sup>

Some industry spokespersons have been saying that the amounts of dietary acrylamide are trivial. However, the government of Sweden, a country with roughly one-thirtieth the population of the U.S., estimates that the contaminant may cause several hundred cancers a year there. That suggests, assuming similar exposure in the U.S. and Sweden, that acrylamide may be causing at least several thousand cancers per year in the U.S. Multiplying that figure by the average American's lifespan, about 75 years, indicates that acrylamide may be causing cancer in roughly two hundred thousand people out of our current population of 280 million. While that is not in the league of tobacco, it is hardly a trivial number.

Acrylamide is also well-recognized as a neurotoxin, and the amounts of acrylamide that we are consuming in foods may be significant. Last June the FDA "determined that the acceptable daily

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<sup>1</sup> Schulz MR, Hertz-Picciotto I. Occup Environ Med. 2001;58:609 (letter commenting on Marsh GM, Lucas LJ, Youk AO, et al. Occup Environ Med. 1999;56:181-90).

intake of acrylamide with respect to neurotoxicity to be 12 micrograms per person per day...’’<sup>2</sup> Considering the paucity of research that could identify a true no-effect level, the ADI of 12 micrograms per day may be overly generous. Nevertheless, the average American appears to be consuming several times that much in french fries, potato chips, and other foods. Heavy consumers of such foods may be getting ten times as much acrylamide as the FDA’s acceptable daily intake.

To begin giving Americans some sense of how much acrylamide is in some common U.S. foods and to contribute to the general pool of knowledge about acrylamide, CSPI commissioned the Swedish government to test about a dozen foods. We provided the test results to the WHO conference in June, as well as to the FDA and general public.

This slide shows our results. We express the acrylamide levels in micrograms per serving, rather than per kilogram, to give consumers a better sense of what they would actually ingest when they eat a serving of food.

It’s also worth comparing acrylamide levels to the amount of acrylamide that might be permitted in California without a Proposition 65 warning notice or restriction. Individual categories of food exceed California’s limit, as does the sum of those foods.

I fully support the FDA’s Action Plan, particularly its efforts to conduct its own research – and monitor and stimulate research by industry and academic scientists – into the amount of acrylamide in various foods, the chemical’s toxicity, the chemical reactions that lead to acrylamide, and the means of preventing acrylamide from forming. The Action Plan does not mention neurotoxicity in particular, but I hope that the government will conduct long-term animal studies to identify potential subtle effects at lower levels than have been studied so far. It is exciting that early research by Health Canada is already paying dividends. The Canadians

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<sup>2</sup> FDA, Federal Register. Vol. 67, page 42715, June 25, 2002.

recently found that acrylamide can form from a reaction between the amino acid asparagine and glucose.

I would like to see the FDA give consumers useful information and advice related to acrylamide. Its past advice is typified by this statement: “Until more is known, FDA is not recommending that consumers change their diet or cooking methods because of concerns about acrylamide.”<sup>3</sup> That isn’t helpful and isn’t consistent with the FDA’s stated goal of informing and educating consumers. The FDA should acknowledge that acrylamide poses a real risk and should provide information about acrylamide levels in the individual foods that it tests. Where there are significant differences between brands, that information could lead to smarter consumer choices and also to improvements by companies marketing the more contaminated products.

Furthermore, I would urge the FDA to advise consumers to eat less of the most contaminated, least nutritious foods – namely French fries and snack chips. Obviously, most people would have done well to eat less of those foods long before acrylamide was discovered in them....but now people have yet another reason to eat less of them.

Thank you.

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<sup>3</sup> FDA. Fed. Reg. Vol. 67, pp. 57827-8, September 12, 2002

